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#### **BRIEF OF APPELLANT**

To: Mail Stop Appeal Brief-Patents Commissioner of Patents

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Appellant appeals from the Office Action mailed September 25, 2009 (hereinafter the "Office Action"). The Commissioner is authorized to charge the fee required under 37 C.F.R. § 41.20(b)(2) to Deposit Account No. 08-2025.

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#### I. REAL PARTY IN INTEREST

The real party in interest of this application is Hewlett-Packard Development Company, L.P. as evidenced by the full assignment of the pending application to Hewlett-Packard Development Company, L.P. recorded starting at Reel 014241, Frame 0756, in the Assignment Branch of the Patent and Trademark Office. The Hewlett-Packard Development Company, L.P., is a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

#### II. RELATED APPEALS AND INTERFERENCES

Appellant, Appellant's undersigned legal representative, and the assignee of the pending application are aware of no appeals or interferences which will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

#### III. STATUS OF THE CLAIMS

Claims 1-7, 9, 10, 12, 14, and 16-51 are pending, stand rejected and are appealed. Claims 8, 11, 13, and 15 are cancelled.

#### IV. STATUS OF AMENDMENTS

No amendments have been filed since the mailing of the Office Action.

### V. SUMMARY OF CLAIMED SUBJECT MATTER

Concise explanations of the subject matter defined in each of the independent claims and argued dependent claims involved in the appeal follow with respect to exemplary illustrative embodiments of the specification and figures.

Referring to independent claim 1, a data management system 16 is shown in one embodiment in Fig. 2 and described at page 5, line 15 of the specification. Client protected computer systems 14 are described at page 4, line 28 according to one embodiment. A plurality of storage devices 34 are described at page 6, line 8

of the specification in one embodiment. Storage control circuitry 20 is described at page 5, line 18 of the specification according to one embodiment.

Referring to dependent claim 2, a request to add a new protected computer system is described at page 10, line 27 of the specification according to one embodiment.

Referring to dependent claim 3, assigning of one storage device responsive to monitoring of status is described at page 10, line 32 according to one embodiment.

Referring to dependent claim 6, assigning the one storage device which has a greatest available capacity is described at page 11, line 12 according to one embodiment.

Referring to dependent claim 7, storage of entireties of data is described at page 8, line 5 according to one embodiment.

Referring to independent claim 16, a data management system 16 is shown in one embodiment in Fig. 2 and described at page 5, line 15 of the specification. Plural means for storing electronic data are described at page 6, line 8 of the specification in the form of storage devices 34 in one embodiment. Protected computer systems 14 are described at page 4, line 28 according to one embodiment. Means for communicating data in the form of a network connection 12 is described at page 4, line 21 according to one embodiment. Means for assigning is described at page 5, line 18 and page 9, line29 of the specification in the form of storage control circuitry 20 according to one embodiment.

Referring to dependent claim 17, storage of entireties of data is described at page 8. line 5 according to one embodiment.

Referring to independent claim 21, a processor-usable medium is described in one embodiment at page 16, line 28. Accessing information regarding storage devices is described at page 10, line 31 according to one embodiment. Association of protected computer systems and storage devices is described at page 8, line 3 according to one embodiment. A request to add a new protected computer system is described at page 10, line 27 of the specification according to one embodiment. Assigning a storage device is described at page 11, line 8 according to one embodiment.

Referring to dependent claim 22, association responsive to user input is described at page 14, line 19 according to one embodiment.

Referring to dependent claim 23, association responsive to monitoring is described at page 11. line 8 according to one embodiment.

Referring to independent claim 24, a plurality of storage devices 34 are described at page 6, line 8 of the specification in one embodiment. Client protected computer systems 14 are described at page 4, line 28 according to one embodiment. Monitoring capacities is described at page 10, line 31 according to one embodiment. Storage operations are described at page 13, line 10 according to one embodiment.

Referring to dependent claim 25, a quantity of data of the protected computer systems exceeding individual capacities of storage devices is described at page 9, line 13 according to one embodiment.

Referring to dependent claim 27, monitoring storage capacities is described at page 11, line 3 according to one embodiment.

Referring to dependent claim 28, monitoring processing capacities is described at page 11, line 5 according to one embodiment.

Referring to dependent claim 31, associating the protected computer system with the one storage device which has a greatest available capacity is described at page 11, line 12 according to one embodiment.

Referring to dependent claim 32, transfer of data is described at page 15, line 20 according to one embodiment.

Referring to independent claim 33, a plurality of storage devices 34 are described at page 6, line 8 of the specification in one embodiment. Client protected computer systems 14 are described at page 4, line 28 according to one embodiment. Storage operations are described at page 13, line 10 according to one embodiment. Monitoring capacities is described at page 10, line 31 according to one embodiment. Providing a new storage device is described at page 13, line 9 of the specification according to one embodiment.

Referring to dependent claim 37, the protected computer systems 14 external of the data management system 16 are described at page 5, line 1 with respect to Fig. 1 according to one embodiment.

Referring to dependent claim 38, the protected computer systems 14 are described at page 4, line 25 according to one embodiment.

Referring to dependent claim 41, the protected computer systems 14 and the data management system 16 are described at page 5, line 1 with respect to Fig. 1 according to one embodiment. A plurality of storage devices 34 are described at page 6, line 8 of the specification in one embodiment. Storage control circuitry 20 is described at page 5, line 18 of the specification according to one embodiment.

Referring to dependent claim 42, the protected computer systems 14 and the data management system 16 are described at page 5, line 1 with respect to Fig. 1 according to one embodiment. A plurality of storage devices 34 are described at page 6, line 8 of the specification in one embodiment. Storage of data using data management system 16 is described at page 5, line 1 according to one embodiment.

Referring to independent claim 43, client protected computer systems 14 are described at page 4, line 28 according to one embodiment. A data management system 16 is shown in one embodiment in Fig. 2 and described at page 5, line 15 of the specification. A plurality of storage devices 34 are described at page 6, line 8 of the specification in one embodiment. Storage control circuitry 20 is described at page 5, line 18 of the specification according to one embodiment.

Referring to dependent claim 45, association of protected computer systems and storage devices is described at page 8, line 3 according to one embodiment.

Referring to dependent claim 46, storage of entireties of data is described at page 8, line 5 according to one embodiment.

Referring to dependent claim 47, page 4, line 12 of the specification discloses a network 10 coupled with protected computer systems 14 and a data management system 16.

Referring to dependent claim 48, processing circuitry of the data management system for performing the monitoring, the associating, and the implementing is disclosed in Fig. 2 and described at page 5, line 25 according to one embodiment.

Referring to dependent claim 49, the implementing storage operations comprising storing the data for the associated one of the protected computer

systems using the associated one of the storage devices is described at page 8, line 3 according to one embodiment.

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. The 102 rejection of claims 1-7, 9-10, 12, 14 and 37-40 over Wahl.
- B. The 102 rejection of claims 16-20 over Wahl.
- C. The 102 rejection of claims 21-23 and 41 over Wahl.
- D. The 102 rejection of claims 24-32, 42 and 48-49 over Wahl.
- E. The 102 rejection of claims 33-36 and 50-51 over Wahl.
- F. The 102 rejection of claims 43-47 over Wahl.
- G. The 102 rejection of claims 2-6 over Wahl.
- H. The 102 rejection of claim 3 over Wahl.
- The 102 rejection of claim 6 over Wahl.
- J. The 102 rejection of claims 7-8 over Wahl.
- K. The 102 rejection of claim 17 over Wahl.
- The 102 rejection of claim 22 over Wahl.
- M. The 102 rejection of claim 23 over Wahl.
- N. The 102 rejection of claim 25 over Wahl.

The 102 rejection of claim 27 over Wahl.

Ο.

- P. The 102 rejection of claim 28 over Wahl.
- Q. The 102 rejection of claim 31 over Wahl.
- R. The 102 rejection of claim 32 over Wahl.
- S. The 102 rejection of claim 37 over Wahl.
- T. The 102 rejection of claim 38 over Wahl.
- U. The 102 rejection of claim 41 over Wahl.
- V. The 102 rejection of claim 42 over Wahl.
- W. The 102 rejection of claim 45 over Wahl.

X. The 102 rejection of claim 46 over Wahl.

Y. The 102 rejection of claim 47 over Wahl.

The 102 rejection of claim 49 over Wahl.

AA. The 101 rejection of claims 21-23 and 41.

BB. The 101 rejection of claims 24-32, 42 and 48-49.

CC. The 101 rejection of claims 48.

DD. The 101 rejection of claims 49.

EE. The objection to the drawings is in error.

FF. The objection to the title is in error.

GG. The objection to the specification is in error.

### VII. ARGUMENT

Applicants note that this is the *third time* Appellants have had to file an appeal in the present application. The original independent claims recite generally the same subject matter since this application was originally filed and which have now been *finally rejected three times by the Office over the same prior art (i.e., Wahl).* After Appellants' filed two previous full appellate briefs in two separate appeals, the Office re-opened prosecution both times and asserted rejections over the same prior art. Now, the application is once again under final rejection over yet the same prior art. In an effort to facilitate the prosecution of this application, Appellants respectfully request that this application be allowed to go to the Board of Appeals for disposition on the merits.

A. Positively-recited limitations of claims 1-7, 9-10, 12, 14 and 37-40 are not disclosed by Wahl and the 102 rejection of the claims is improper for this reason.

Independent claim 1 recites that the data management system comprises a data storage system configured to store data of a <u>plurality of protected computer</u> systems. The Examiner relies upon the teachings of col. 24, lines 5-24 of Wahl.

These teachings refer to a primary computer system 12 and a secondary computer system 14. Referring to col. 6, lines 35+ of Wahl, the primary computer system 12 is disclosed as a storage device which "provides primary application and data storage services to a user." Wahl fails to teach that the primary computer system 12 stores data of any other devices. Furthermore, the secondary computer system 14 is disclosed as a storage device which "stores a copy of the data from the primary computer system 12" per col. 6, lines 42+. The teachings of secondary computer system 14 storing data of a single device fails to teach or suggest the claimed limitations of the data storage system configured to store data of a plurality of protected computer systems.

The Office in relying upon the teachings of col. 24, lines 5-24 of Wahl (where the secondary computer system 14 stores the data of the primary computer system 12) as allegedly teaching the above-recited claimed limitations takes the position that the secondary computer system 14 teaches the claimed data storage system and the primary computer system 12 teaches the claimed protected computer systems. However, Wahl is void of any teachings that the secondary computer system 14 stores data of a plurality of computer systems (primary or otherwise) which fails to teach the claimed limitations that the data storage system is configured to store data of a plurality of protected computer systems.

Appellants respectfully submit that the above positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection of the claims is improper for at least this reason.

Independent claim 1 further recites the data storage system comprises a plurality of storage devices and a quantity of data of the protected computer systems to be stored exceeds capacities of individual ones of the storage devices. The Office relies upon teachings in col. 24, lines 5-24 and col. 3, lines 24-37 of Wahl. However, the teachings in col. 24 generally describe the secondary storage system 14 storing data of the primary storage system 12 but Appellants have failed to uncover any teachings that the quantity of data of the primary storage system 12 exceeds the capacity of storage devices of the secondary computer system 14 which fails to teach the claimed limitations that the quantity of data of the protected computer systems to be stored exceeds capacities of individual ones of the storage devices.

The teachings in col. 3, lines 24-37 are generic teachings included in the Summary of Wahl and fail to teach that a quantity of data of the primary computer system 12 exceeds capacities of individual ones of the storage devices of the secondary computer system 14 relied upon by the Office as teaching the protected computer systems and the plurality of storage devices, respectively, recited in claim 1. The teachings in col. 3 fail to teach or suggest the above-recited limitations.

Furthermore, the teachings in col. 3 refer to the writelog device and Appellants submit that the Wahl teachings of writing of data from a cache of the writelog device of the primary system 12 to a dirty bit map disk drive device of the writelog device to avoid memory overflow fails to refer to the computer systems having data to be stored and fails to teach the limitations that the quantity of data of the computer systems to be stored exceeds capacities of individual ones of the storage devices. The writelog device of Wahl is part of the primary computer system per col. 6, lines 59 + and fails to teach that the quantity of data of the protected computer systems exceeds capacities of individual ones of the storage devices of the data storage system. Furthermore, the writelog device journals time-sequenced writes to the local data device 16 and accordingly Wahl teaches storage of data of the primary computer system 12 using the local data devices.

Appellants respectfully submit that the above positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection of the claims is improper for at least this reason.

Claim 1 further recites storage control circuitry configured to <u>assign</u> individual ones of the individual storage devices to store data for respective ones of the protected computer systems. The Office above relies upon the teachings of the computer systems 12, 14 of Wahl to teach the protected computer systems and the data storage system, respectively. However, the teachings relied upon by the Office fail to teach a plurality of primary computer systems 12 let alone that plural storage devices of the secondary computer systems 14 are assigned to store data for respective ones of plural primary computer systems 12.

The Office relies upon teachings in col. 5, lines 32 – col. 6, line 27 and col. 24, lines 5-24 of Wahl as allegedly teaching the above-recited limitations. However, the teachings in cols. 5 and 6 are generic teachings which generally describe aspects of the data mirroring system of Wahl and are void of teachings.

that the primary and secondary computer systems 12, 14 teach the above-recited limitations. Furthermore, the teachings in col. 24 generally describe the primary and secondary storage systems 12, 14 but Appellants have failed to uncover any teachings therein of the claimed limitations reciting storage control circuitry configured to assign individual ones of the individual storage devices to store data for respective ones of the protected computer systems.

Furthermore, the teachings in col. 7, lines 65 - col. 8, line 10 of Wahl also fail to teach the storage circuitry defined in claim 1. At these teachings, Wahl provides that more memory or disk space is assigned to the writelog device. However, as discussed above, the Office relies upon the teachings of the primary and second computer systems 12, 14 as opposed to the writelog device as teaching the claimed protected computer systems and the storage devices. The assigning of additional memory or disk space to the writelog device fails to teach the storage control circuitry configured to assign individual ones of the individual storage devices to store data for respective ones of the protected computer systems as claimed in combination with the other limitations.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

# B. Positively-recited limitations of claims 16-20 are not disclosed by Wahl and the 102 rejection of the claims is improper for this reason.

Independent claim 16 recites a data management system comprising <u>plural</u> <u>means for storing electronic data</u>, means for communicating data intermediate the plural means for storing and a plurality of protected computer systems, <u>wherein a quantity of data of the protected computer systems exceeds individual data storage capacities of individual ones of the means for storing.</u>

The Office relies upon teachings of the Summary of the Invention section including col. 3 of Wahl in support of the rejection and as teaching the above-identified limitations. In particular, the teachings at col. 3, lines 24+ of Wahl refer to a writelog device and for assigning additional memory space to prevent memory overflow conditions. Appellants have failed to uncover any teachings in col. 3, lines

24+ of quantities of data of the protected computers systems and the individual data storage capacities of individual ones of the means for storing. Appellants have failed to uncover any teachings that the quantity of data of the protected computer systems exceeds individual data storage capacities of individual ones of the means for storing. Furthermore, the teachings at col. 3, lines 38+ of Wahl disclose volume grouping, or logical groups and Appellants have failed to uncover any teachings in col. 3, lines 38+ of quantities of data of the protected computers systems and the individual data storage capacities of individual ones of the means for storing. Appellants have failed to uncover any teachings that the quantity of data of the protected computer systems exceeds individual data storage capacities of individual ones of the means for storing.

Appellants respectfully submit that the above-mentioned positively recited limitations of the claims are not disclosed in Wahl and the 102 rejection is improper for at least this reason.

Claim 16 also recites means for <u>assigning individual ones of the means for</u> storing to store data for respective ones of the protected computer systems.

The Office again relies upon the Summary of Invention section at col. 3, lines 24-54 of Wahl in support of the rejection. The teachings at col. 3, lines 24+ of Wahl teach dynamically assigning more memory space to prevent a memory overflow condition. Appellants submit that the dynamic assignment of more memory space fails to teach or refer to protected computer systems or the claimed limitations of the means for assigning individual ones of the means for storing to store data for respective ones of the protected computer systems.

Furthermore, Appellants have failed to uncover any teachings in the generic teachings of col. 3, lines 38+ of Wahl with respect to the claimed protected computer systems. The generic teachings with respect to volume grouping or logical groups are void of disclosing the positively claimed means for assigning individual ones of the means for storing to store data for respective ones of the protected computer systems as claimed.

Appellants respectfully submit that the above-mentioned positively recited limitations of the claims are not disclosed in Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

### C. Positively-recited limitations of claims 21-23 and 41 are not disclosed by Wahl and the 102 rejection of the claims is improper for this reason.

Independent claim 21 recites a processor-usable medium configured to store processor-usable code configured to cause processing circuitry of storage control circuitry to associate individual ones of the protected computer systems with respective ones of a plurality of storage devices.

The Office relies upon the teachings of col. 23, line 61 – col. 24, line 29 of Wahl in support of the rejection and as allegedly teaching the claimed association. Appellants respectfully submit the teachings in Wahl fail to teach the claimed limitations. In particular, the "server fail-over computer system" of col. 23 has not been demonstrated to teach or suggest any association let alone the claimed limitations regarding association of individual ones of the protected computers systems with respective ones of the storage devices. The teachings in col. 24 of Wahl refer to generic features and Appellants have failed to uncover any reference to protected computer systems therein or the claimed limitations of association of individual ones of the protected computer systems with respective ones of the storage devices as claimed.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Claim 21 recites <u>monitoring capacities of the storage devices</u>. The Office relies upon the teachings in cols. 5-6 of Wahl in support of the rejection. The teachings in col. 5, lines 57 – col. 6, line 27 of Wahl generically refer to a configuration of the mirroring system and Appellants have failed to uncover any reference to "capacity" therein or the claimed limitations of monitoring capacities of the storage devices. The teachings relied upon in col. 6 of Wahl at lines 28+ generally discuss primary and secondary computer systems 12, 14 but Appellants have failed to uncover any reference to capacity therein let alone the claimed limitations of monitoring capacities of the storage devices. Appellants have electronically searched Wahl and have failed to uncover any teaching to "capacity"

let alone the claimed limitations of monitoring capacities of the storage devices as claimed.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Claim 21 additionally recites receiving a request to add a new protected computer system and assigning the new protected computer to one of the storage devices responsive to the monitoring of the capacities. The Office refers to the teachings of col. 5, lines 57 to col. 6, line 58 of Wahl. Appellants have failed to uncover any teachings in such portion of Wahl with respect to assignment of a new protected computer system. Appellants have additionally failed to locate any teachings of assignment of the new protected computer system to one of the storage devices. Appellants have additionally failed to locate any teachings of assignment responsive to monitoring as claimed.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

# D. Positively-recited limitations of claims 24-32, 42 and 48-49 are not disclosed by Wahl and the 102 rejection of the claims is improper for this reason.

Independent claim 24 recites a data management system operation storage method comprising monitoring capacities of individual ones of the storage devices of the data management system and associating one of the protected computer systems with one of the storage devices using the monitoring. The Office relies upon the teachings of col. 15, lines 1-29 of Wahl in support of the rejection and as teaching the monitoring and the associating. Appellants have failed to uncover any teaching or reference to a protected computer system in col. 15. In addition, Appellants have failed to uncover any teaching in col. 15 of Wahl of the claimed limitations of associating one of the protected computer systems with one of the storage devices using the monitoring capacities of individual ones of the storage devices as positively claimed.

Appellants respectfully submit that the above-mentioned positively recited limitations of the claims are not disclosed in Wahl and the 102 rejection is improper for at least this reason.

Claim 24 further recites implementing storage operations of the data for the associated one of the protected computer systems using the associated one of the storage devices in accordance with the associating in combination with the monitoring of capacities and associating responsive to the monitoring limitations discussed above. The Office relies upon the teachings of col. 24, lines 5-24 of Wahl as teaching the implementing. However, Appellants respectfully submit that the teachings relied upon by the Office generically refer to providing continuous network data mirroring and data replication and recovery from failures but Appellants have failed to uncover any teachings of the claimed limitations of implementing storage operations for an associated one of the protected computer systems using the associated one of the storage devices in combination with the other positively claimed limitations.

Appellants respectfully submit that the above-mentioned positively recited limitations of the claims are not disclosed in Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

# E. Positively-recited limitations of claims 33-36 and 50-51 are not disclosed by Wahl and the 102 rejection of the claims is improper for this reason.

Independent claim 33 recites providing a plurality of storage devices of a data management system configured to store data for a plurality of protected computer systems, and wherein the storage devices are external of the protected computer systems. The Office relies upon the teachings of Fig. 1 of Wahl as teaching the above-recited limitations. Appellants have failed to uncover any teachings in Fig. 1 of the claimed protected computer systems or that the storage devices are external of the protected computer systems as positively claimed.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Claim 33 further recites <u>monitoring capacities of the storage devices using storage control circuitry</u>. Appellants have failed to uncover any teachings in col. 3, lines 24-37 of Wahl of the claimed limitations of monitoring capacities.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Claim 33 recites providing a <u>new storage device</u> configured to store data for at least one of the protected computer systems. Appellants have failed to uncover any teachings in the server fail-over computer system of col. 23 or the generic teachings of col. 24 of Wahl of the claimed limitations regarding providing a new storage device.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Claim 33 recites coupling <u>processing circuitry</u> of the <u>new storage device</u> with the <u>storage control circuitry</u>. The Office relies upon the teachings of Fig. 5 of Wahl in support of the rejection. Appellants have failed to uncover any reference in Fig. 5 to a <u>new storage device</u> or <u>coupling processing circuitry of the new storage device</u> with the <u>storage control circuitry</u> which also is claimed as <u>monitoring the capacities of the storage devices</u> as recited above.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

# F. Positively-recited limitations of claims 43-47 are not disclosed by Wahl and the 102 rejection of the claims is improper for this reason.

The Office has failed to identify teachings of Wahl which disclose the limitations of independent claim 43. In particular, the Office refers to claim 43 on page 8 of the Office Action but thereafter recites verbiage which appears to correspond to independent claim 1 which is an entirely different claim set than those recited in claims 43-47. Appellants respectfully assert that Wahl fails to teach or suggest limitations of the claims and the 102 rejection is improper for at least this reason.

Independent claim 43 recites a plurality of <u>protected computer systems</u> individually comprising <u>processing circuitry</u> configured to process data and <u>storage circuitry</u> configured to store the data. Appellants have failed to uncover any teachings in Wahl of the above-recited limitations and the Office has failed to identify teachings relied upon as allegedly teaching the above-recited limitations.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Claim 43 also recites, in addition to the protected computer systems, a data management system comprising a data storage system configured to store the data of the protected computer systems, wherein the data storage system comprises a plurality of storage devices individually having a respective capacity, and a quantity of the data of the protected computer systems to be stored by the data management system exceeds capacities of individual ones of the storage devices.

Appellants have failed to uncover any teachings in Wahl including col. 3, lines 24-54 regarding the limitations of the capacities of the storage devices or that a quantity of data of the protected computer systems exceeds capacities of individual ones of the storage devices as claimed.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Independent claim 43 additionally recites that the data management system comprises storage control circuitry coupled with the data storage system and configured to assign individual ones of the individual storage devices to store data for respective ones of the protected computer systems. The teachings in col. 3, lines 24-54 of Wahl refer to a writelog being configured so that more memory space is dynamically assigned to the writing device to provide a memory overflow condition. Writelog devices are components of the primary computer system 12 which provides primary application and data storage services to a user and Appellants have failed to uncover any teachings in Wahl including the teachings of the writelog devices of Wahl with respect to protected computer systems or the specifically claimed limitations of the storage control circuitry configured to assign individual ones of the individual storage devices to store data for respective ones of the protected computer systems as positively claimed.

Appellants respectfully submit that the above-mentioned positively recited limitations of the claims are not disclosed in Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

G. Positively-recited limitations of claims 2-6 are not disclosed by Wahl and the 102 rejection of the claims is improper for this reason.

Claim 2 recites the storage control circuitry is configured to <u>receive a request</u> to add a new protected computer system and to <u>assign only one of the storage</u> devices to implement data storage operations with respect to the new protected computer system as a result of the request.

The Office relies upon the teachings of col. 6, lines 34-58 of Wahl in support of the rejection of claim 2. Appellants have failed to uncover any teachings in the generic disclosure of col. 6 of a <u>request or receipt of a request</u>. In addition, Appellants have failed to uncover any teachings in col. 6 or otherwise of Wahl of the storage control circuitry configured to <u>assign only one</u> of the storage devices to implement data storage operations with respect to the <u>new protected computer</u> system as a result of the request.

Referring to paragraph 27 of page 16 of the Office Action, MPEP 2114 (8th ed., rev. 7) is void of any authority that 'wherein' clauses cannot be relied upon for patentability. Furthermore, the wherein clause reciting that the <u>storage control circuitry is configured to</u> receive a request to add a new protected computer system and to assign only one of the storage devices to implement data storage operations with respect to the new protected computer system as a result of the request <u>clearly recites structure</u> and such claimed structure in combination with the other limitations of the explicitly claimed data management system is not disclosed by the teachings of Wahl.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

### H. Positively-recited limitations of claim 3 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 3 depends from claim 2 and further recites that the storage control circuitry is configured to monitor a status of the one storage device and to assign the one storage device for the new protected computer system using the monitoring. The Office identifies the teachings in col. 15, lines 1-29 of Wahl in support of the rejection. Appellants have failed to uncover any teachings in Wahl that the teachings of col. 15 relate to situations wherein a request to add a new protected computer system is received as recited in dependent claim 2 from which claim 3 depends. In addition, Appellants have failed to uncover any teachings in col. 15 of assigning the one storage device for the new protected computer system let alone the limitations that the assigning uses the monitoring the status of the one storage device.

Appellants respectfully submit that the above-mentioned positively recited limitations of the claims are not disclosed in Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

### Positively-recited limitations of claim 6 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 6 depends from claim 3 and recites monitoring a status of a plurality of the storage devices, and the assigning comprises assigning the one storage device which has a greatest available capacity using the monitoring. Claim 3 additionally recites assigning the one storage device for the new protected computer system. The Office relies upon the teachings of col. 3, lines 24-37. Appellants have failed to uncover any teachings in col. 3 with respect to the claimed limitations of assigning one storage device for a new protected computer system as claimed. Appellants have additionally failed to uncover any teachings in Wahl of the assigning the one storage device to the new protected computer system having a greatest available capacity as claimed.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

## J. Positively-recited limitations of claims 7-8 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 7 recites that entireties of data for the protected computer systems are stored using respective assigned ones of the storage devices. The Office relies upon the teachings of col. 5, line 57 to col. 6, line 27 of Wahl in support of the rejection. Appellants have failed to uncover any teachings regarding protected computer systems in the teachings relied upon by the Office. In addition, Appellants have failed to uncover any teachings of the specifically claimed limitations that entireties of data for the protected computer systems are stored using respective assigned ones of the storage devices.

Appellants respectfully submit that the above-mentioned positively recited limitations of the claims are not disclosed in Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

### K. Positively-recited limitations of claim 17 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 17 recites the plural means for storing individually comprise means for storing an entirety of the data for a respective one of the protected computer systems. The Office generally refers to Fig. 1 of Wahl in support of the rejection. Appellants have failed to uncover any reference to protected computer systems in Fig. 1. In addition, Appellants have failed to uncover any teachings of the specifically claimed limitations that the plural means for storing individually comprise means for storing an entirety of the data for a respective one of the protected computer systems.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

## L. Positively-recited limitations of claim 22 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 22 recites that the processor-usable code is configured to cause the processing circuitry to perform the association as a result of <u>user input</u> in combination with the limitations of claim 21 reciting the code is configured to cause the processing circuitry to <u>associate individual ones of the protected computer</u> systems with respective ones of the storage devices.

Claim 22 depends from claim 21. The Office, in support of the rejection of claim 21, relied upon the teachings of the secondary computer system 14 storing data of the primary computer system 12 of Wahl per col. 24 as teaching the storage devices and the protected computer system, respectively. The Office relies upon the teachings of col. 15, lines 30-53 of Wahl as allegedly teaching the limitations of claim 22. Appellants have failed to uncover any teachings in col. 15 of Wahl of association of primary computer systems 12 with secondary computer systems 14 or association of plural primary computer systems 12 with respective ones of a plurality of secondary computer systems 14 as a result of user input which fails to the teach the limitations of the code configured to cause the processing circuitry to perform the association as a result of user input in combination with the limitations of claim 21 reciting the code is configured to cause the processing circuitry to associate individual ones of the protected computer systems with respective ones of the storage devices.

Appellants respectfully submit that the above-mentioned positively recited limitations of the claims are not disclosed in Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

## M. Positively-recited limitations of claim 23 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 23 recites that the processor-usable code is configured to cause the processing circuitry to perform the association using the monitoring of the capacities of the storage devices in combination with the limitations of claim 21 reciting the code is configured to cause the processing circuitry to associate

individual ones of the protected computer systems with respective ones of the storage devices.

Claim 23 depends from claim 21. The Office, in support of the rejection of claim 21, relied upon the teachings of the secondary computer system 14 storing data of the primary computer system 12 per col. 24 of Wahl as teaching the storage devices and the protected computer system, respectively. The Office relies upon the teachings of col. 15, lines 1-29 of Wahl as allegedly teaching the limitations of claim 23. Appellants have failed to uncover any teachings in col. 15 of Wahl of association of primary computer systems 12 with secondary computer systems 14 or association of plural primary computer systems 12 with respective ones of a plurality of secondary computer systems 14 using monitoring of capacities of the secondary storage devices 14 which fails to the teach the limitations of the code configured to cause the processing circuitry to associate individual ones of the protected computer systems with respective ones of the storage devices using monitoring of the capacities of the storage devices as recited in claim 23.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

## N. Positively-recited limitations of claim 25 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 25 recites that a quantity of data of the protected computer systems to be stored exceeds individual capacities of individual ones of the storage devices. The Office relies upon the teachings of col. 3, lines 24-37 of Wahl. Appellants have failed to uncover any teachings in col. 3 of protected computer systems, a quantity of data of the protected computer systems or that the quantity of data of the protected computer systems exceeds individual capacities of individual ones of the storage devices as claimed.

Appellants respectfully submit that the above-mentioned positively recited limitations of the claims are not disclosed in Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

## Positively-recited limitations of claim 27 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 27 in combination with claim 24 from which it depends recites monitoring storage capacities of the storage devices and associating one of the protected computer systems with one of the storage devices using the monitoring. Appellants have failed to uncover any teachings in col. 15 of Wahl of the claimed associating one of the protected computer systems with one of the storage devices using the monitoring of storage capacities of the storage devices.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

## P. Positively-recited limitations of claim 28 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 28 in combination with claim 24 from which it depends recites monitoring processing capacities of the storage devices and associating one of the protected computer systems with one of the storage devices using the monitoring. Appellants have failed to uncover any teachings in col. 15 of Wahl of the claimed associating one of the protected computer systems with one of the storage devices using the monitoring of processing capacities of the storage devices.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

### Q. Positively-recited limitations of claim 31 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 31 recites associating the one protected computer system with the one storage device having a greatest available capacity. The Office relies upon the

teachings of col. 3, lines 24-37 of Wahl in support of the rejection. Appellants have failed to uncover any reference therein to a protected computer system or a greatest available capacity of a storage device in such teachings let alone the specific limitations of associating the one protected computer system with the one storage device having a greatest available capacity.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

# R. Positively-recited limitations of claim 32 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 32 recites transferring at least a portion of the data of the <u>one protected computer system</u> from the <u>one storage device to an other storage device</u>. The Office generally relies upon the teachings of Fig. 5 of Wahl in support of the rejection. Appellants have failed to uncover any teachings in Fig. 5 of Wahl or otherwise of the claimed limitations of transferring at least a portion of the data of the <u>one protected computer system</u> from the <u>one storage device to an other storage device</u>.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

## S. Positively-recited limitations of claim 37 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 37 recites that the <u>protected computer systems</u> are <u>external of the</u> data management system.

At page 10 of the Office Action, the Office recites the elements 16, 18, 18A and 32 of Fig. 1 of Wahl as disclosing the claimed data management system and the file system 28 as disclosing the claimed protected computer systems. However, claim 37 depends directly from claim 1 and the Office has failed to identify any teachings that the teachings of the elements 16, 18, 18A and 32 and

the file system 28 disclose the data management system and protected computer systems as claimed in both of claims 1 and 37.

More specifically, the single file system 28 fails to teach the plurality of protected computer systems recited in the claims. Furthermore, the Office has failed to identify that individual storage devices of elements 16, 18, 18A and 32 (construed as teaching the data management system) are assigned to respective ones of plural file systems 28 which fails to teach the claimed limitations that individual ones of the storage devices are assigned to store data for respective ones of the protected computer systems when the limitations are properly interpreted in combination with the limitations of claim 1. Appellants respectfully submit that the failure of the Office to identify the specific teachings which are alleged to teach the claimed limitations when properly combined with claim 1 illustrates the tenuous and improper nature of the rejection.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

# T. Positively-recited limitations of claim 38 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 38 recites that the <u>protected computer systems</u> are associated with <u>respective different entities</u> and the protected computer systems are <u>independent</u> and not associated with one another. The Office relies upon the teachings of the Field of the Invention of Wahl in support of the rejection. Appellants respectfully submit that the generic teachings of the Field of the Invention fail to teach the claimed limitations regarding the protected computer systems as specifically claimed and especially when properly read in combination with the limitations of claim 1 from which claim 38 directly depends. Furthermore, the Office has failed to identify which specific teachings are believed by the Office to recite the protected computer systems. Appellants respectfully request that the failure of the Office to identify the specific teachings which are alleged to teach the claimed protected computer systems when such limitations are properly considered in combination.

with the limitations of the base claim illustrates the tenuous and improper nature of the rejection.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

## U. Positively-recited limitations of claim 41 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 41 recites that the storage control circuitry and the plurality of storage devices are components of a data management system which is configured to store data of the plurality of protected computer systems, and wherein the protected computer systems are external of the data management system and the storage devices. The Office generically refers to the teachings of Figs. 1 and 5 of Wahl in support of the rejection without identifying which teachings are believed by the Office to disclose the claimed protected computer systems, the data management system and the storage devices. Appellants respectfully submit that the teachings of Figs. 1 and 5 fail to teach the claimed limitations as specifically claimed and especially when properly read in combination with the limitations of claim 21 from which claim 41 depends. Appellants respectfully submit that the failure of the Office to identify the specific teachings in Figs. 1 and 5 which are alleged to teach the claimed protected computer systems, the data management system and the storage devices when such limitations are properly considered in combination with the limitations of claim 21 illustrates the tenuous and improper nature of the rejection.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

## V. Positively-recited limitations of claim 42 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 42 recites that the <u>storage devices</u> of the data management system are <u>external of the protected computer systems</u>, storing data using storage circuitry of the protected computer systems and storing the data using <u>respective ones</u> of the storage devices associated with the protected computer systems.

The Office generically refers to the teachings of Figs. 1 and 5 and col. 5, line 32 to col. 6, line 27 of Wahl in support of the rejection without identifying which teachings are believed by the Office to disclose the claimed protected computer systems, the data management system and the storage devices. Appellants respectfully submit that the teachings of Figs. 1 and 5 and cols. 5 and 6 fail to teach the claimed limitations as specifically claimed and especially when properly read in combination with the limitations of claim 24 from which claim 42 depends. Appellants respectfully submit that the failure of the Office to identify the specific teachings of the prior art which are alleged to teach the claimed protected computer systems, the data management system and the storage devices when such limitations are properly considered in combination with the limitations of claim 24 illustrates the tenuous and improper nature of the rejection.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

# W. Positively-recited limitations of claim 45 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 45 recites that the storage control circuitry is configured to associate the individual storage devices with respective ones of the protected computer systems using information regarding capacities of the storage devices.

The Office has failed to identify teachings of Wahl which disclose the limitations of claim 45. In particular, the Office refers to claim 45 on page 9 of the Office Action but thereafter recites verbiage which appears to correspond to claim 6 which recites entirely different limitations than those recited in claim 45. Furthermore, the Office has failed to identify which specific teachings in col. 3,

lines 24-37 of Wahl are interpreted to disclose the different claim limitations of the storage control circuitry, storage devices, and protected computer systems of claim 45 especially when such claim limitations are properly considered with the limitations of claim 43 from which claim 45 depends and which illustrates the tenuous and improper nature of the rejection.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

# X. Positively-recited limitations of claim 46 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 46 recites that <u>entireties of the data</u> of the <u>protected computer</u> <u>systems</u> are <u>individually stored</u> by the <u>respective assigned ones of the individual</u> storage devices.

The Office relies upon the teachings of col. 5, line 57 to col. 6, line 27 of Wahl in support of the rejection. Appellants have failed to uncover any teachings regarding protected computer systems or the individual storage devices in the teachings relied upon by the Office. Furthermore, the Office has failed to identify which specific teachings in cols. 5 and 6 of Wahl are interpreted to disclose the different claim limitations of the storage devices and protected computer systems of claim 46 especially when such claim limitations are properly considered with the limitations of claim 43 from which claim 46 depends and which illustrates the tenuous and improper nature of the rejection.

Appellants respectfully submit that positively-recited limitations of the claims are not disclosed by Wahl and the 102 rejection is improper for at least this reason.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

## Y. Positively-recited limitations of claim 47 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 47 recites that the protected computer systems are individually configured to communicate the data to the data management system via a network.

The Office generically refers to Figs. 1, 3, and 5 of Wahl on page 11 of the Office Action as allegedly teaching the above-recited limitations. Fig. 1 teaches a LAN/WAN 20. The Office has failed to identify in the Office Action any teachings that protected computer systems of Wahl are configured to communicate data to a data management system using the LAN/WAN 20 of Fig. 1 in combination with the other positively-recited limitations of claim 43 from which claim 47 depends. Appellants have failed to uncover any network teachings with respect to Fig. 3 of Wahl and the Office has failed to identify any network teachings in Fig. 3 in support of the rejection. Appellants have failed to uncover any network teachings with respect to Fig. 5 of Wahl and the Office has failed to identify any network teachings in Fig. 5 in support of the rejection.

Appellants respectfully submit that positively-recited limitations of the claim are not disclosed by Figs. 1, 3 and 5 of Wahl and the 102 rejection is improper for at least this reason.

The Office refers to claim 47 on page 9 of the Office Action but thereafter recites verbiage which appears to correspond to claim 7 which recites entirely different limitations than those recited in claim 47. Furthermore, the Office has failed to identify which specific teachings in col. 10, lines 62 – col. 12, line 20 of Wahl are interpreted to disclose the different claim limitations of the data management system, the network, and protected computer systems of claim 47 especially when such claim limitations are properly considered with the limitations of claim 43 from which claim 47 depends and which illustrates the tenuous and improper nature of the rejection.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

### Positively-recited limitations of claim 49 are not disclosed by Wahl and the 102 rejection of the claim is improper for this reason.

Claim 49 depends from claim 24 and recites that the *implementing storage* operations comprises storing the data for the associated one of the protected computer systems using the associated one of the storage devices.

The Office generically refers to cols. 5-6 of Wahl as allegedly teaching the above-recited limitations. The Office has failed to identify how the Wahl teachings

relied upon as supporting the rejection of claim 24 from which claim 49 depends further disclose the limitations of claim 49. The Office has failed to identify the specific teachings of Wahl which disclose the claimed protected computer systems, data management system and storage devices as recited in the claims. Appellants respectfully submit that the limitations of storing the data for the associated one of the protected computer systems using the associated one of the storage devices are not disclosed by the prior art and the rejection is in error.

Appellants respectfully request reversal of the rejections for at least the above-mentioned compelling reasons.

## AA. Claims 21-23 and 41 recite statutory subject matter and the 101 rejection is in error.

Appellants respectfully submit the Office misinterprets the specification teachings in support of the rejection. The Office baldly states that infrared media cannot store data. The Office has identified no evidence or objective support apart from the mere subjective opinions of the Examiner for this position. Regardless, Appellants note that the claim clearly and explicitly states that the processor-usable medium is configured to store processor-usable code. One of ordinary skill in the art would understand that the medium of claim 21 stores code and accordingly does not encompass carrier wavers or infrared media for transferring data.

Appellants respectfully submit that the claim positively-recites an appropriate article of manufacture claim which comprises a processor-usable medium configured to store processor-usable code. Appellants respectfully submit that the Office has omitted the explicit claimed language that the medium is configured to store code in arriving at the allegation that claim 21 fails to recite patentable subject matter.

Appellants respectfully submit that the 101 rejection is in error for at least the above-mentioned reason.

Furthermore, the Office at page 5 of the Office Action misquotes the explicit teachings of the specification again in an effort to reject claim 21 under 101. Paragraph 0067 does not state that articles of manufacture are embodied within a data signal. To the contrary, paragraph 0067 provides that "processor-usable code may be provided via articles of manufacture, such as an appropriate processor-usable medium, or alternatively embodied within a data signal" (emphasis added).

Such paragraph is clear that the <u>code</u> is provided by an article of manufacture or alternatively embodied within a data signal and <u>does not state that articles of manufacture may be embodied within a data signal</u>. Claim 21 clearly recites that it is directed to an article of manufacture as distinguished from a data signal, and additionally, a data signal may not be fairly considered to store processor-usable code as positively-recited in the claim itself.

Appellants respectfully submit the Office has misinterpreted the language of claim 21 as well as the explicit teachings of the specification in support of the rejection. Appellants respectfully submit the 101 rejection is in error.

However, if the 101 rejection is deemed to appropriate contrary to the above, Appellants agree to amend the specification to remove data signal and infrared media from paragraph 0067.

Appellants respectfully request reversal of the 101 rejection for the abovementioned compelling reasons.

## BB. Claims 24-32, 42 and 48-49 recite statutory subject matter and the 101 rejection is in error.

Appellants respectfully submit that independent claim 24 recites statutory subject matter and the 101 rejection is in error.

The Office states that a statutory process must be tied to another statutory class (such as a particular apparatus of article of manufacture). Referring to the explicit language of independent claim 24, Appellants note that the Office fails to recite the pending claim language on page 6 of the Office Action in formulating the 101 rejection. To the contrary of the statements on page 6 of the Office Action, Claim 24 clearly recites providing a plurality of storage devices of a data management system. Accordingly, claim 24 is clearly tied to a particular apparatus in the form of the data management system which includes storage devices which meets the test for 101 subject matter set forth by the Office on page 5 of the Office Action.

Furthermore, the claim 24 also recites that the *storage devices individually* comprise <u>processing circuitry</u> and a <u>storage space</u> further illustrating that the claim is tied to a particular apparatus.

Additionally, claim 24 also recites implementing storage operations using the associated one of the storage devices of the data management system which comprises processing circuitry and a storage space which further illustrates that the process is tied to a particular apparatus.

Appellants respectfully submit that claim 24 recites statutory subject matter for the above-mentioned compelling reasons as well as the Office's interpretation of claim language which is not currently pending nor under appeal and the 101 rejection is in error for at least the above-mentioned compelling reasons.

Appellants respectfully request reversal of the 101 rejection.

CC. Claim 48 recites statutory subject matter and the 101 rejection is in error.

Claim 48 recites that the *monitoring, the associating, and the implementing* of claim 24 comprise acts performed by <u>processing circuitry of the data</u> management system.

Appellants respectfully submit that claim 48 recites statutory subject matter under 101.

The Office states on page 5 of the Office Action that claims 48-49 are added to the 101 rejection. However, thereafter the Office fails to refer to claim 48 in setting forth the 101 rejection.

Claim 48 depends from claim 24. In setting forth the 101 rejection of the claims, the Office alleges that the claims contain no limitation which ties the claim to a particular apparatus. Appellants respectfully disagree. Claim 48 explicitly recites that the monitoring, the associating, and the implementing of claim 24 comprise acts performed by processing circuitry of the data management system. Accordingly, claim 48 clearly is tied to a particular apparatus in the form of data management system and the processing circuitry thereof performs the positively-recited acts of claim 24 and accordingly the claim clearly recites statutory subject matter in accordance with the authority set forth by the Examiner. Furthermore, Appellants respectfully submit that the failure of the Office to address claim 48 in the 101 rejection illustrates the tenuous and improper nature of the rejection.

Appellants respectfully submit that claim 48 recites statutory subject matter for the above-mentioned compelling reasons and the 101 rejection is in error.

Appellants respectfully request reversal of the 101 rejection.

DD. Claim 49 recites statutory subject matter and the 101 rejection is in

Claim 49 recites that the *implementing storage operations comprises storing* the data for the associated one of the protected computer systems <u>using the</u> associated one of the **storage devices**.

Appellants respectfully submit that claim 49 recites statutory subject matter under 101.

The Office states on page 5 of the Office Action that claims 48-49 are added to the 101 rejection. However, thereafter the Office fails to refer to claim 49 in setting forth the 101 rejection.

In setting forth the 101 rejection of the claims, the Office alleges that the claims contain no limitation which ties the claim to a particular apparatus. Appellants respectfully disagree. Claim 49 explicitly recites storing the data for the associated one of the protected computer systems using the associated one of the storage devices of the data management system. When properly read in combination with claim 24. Appellants respectfully submit that claim 49 clearly is tied to a particular apparatus in the form of data management system and the storage devices thereof and accordingly the claim clearly recites statutory subject matter. In addition, Appellants respectfully submit that the failure of the Office to address claim 49 in the 101 rejection illustrates the tenuous and improper nature of the rejection.

Appellants respectfully submit that claim 48 recites statutory subject matter for the above-mentioned compelling reasons and the 101 rejection is in error.

Appellants respectfully request reversal of the 101 rejection.

#### EE. The objection to the drawings is in error.

Referring to the objection to the drawings, the Office has requested that Fig. 1 be labeled as prior art. Applicants respectfully submit that Fig. 1 is not prior art and is correct as-filed. Furthermore, Applicants respectfully submit that the request to amend Fig. 1 to recite "prior art" is contrary to the teachings of the specification which clearly recite that Fig. 1 illustrates inventive embodiments of the present

disclosure and accordingly the request is also contrary to MPEP 2163.06 ( $8^{th}$  ed., rev. 7).

Applicants have electronically searched the entirety of the present specification and have failed to uncover any reference therein to "prior art." let alone any reference in the specification that Fig. 1 is prior art. To the contrary of stating that Fig. 1 is prior art, the specification clearly states that Fig. 1 is directed towards embodiments of the invention as set forth in the Detailed Description of the Invention section of the specification.

Applicants also respectfully submit that the analysis of the Office set forth on page 2 of the Office Action is faulty. In particular, the Office alleges that the protected computer systems are common and well known. However, Fig. 1 illustrates a data management system 16 1. Indeed, Fig. 1 illustrates one possible application of one embodiment of the data management systems which are claimed in independent claims 1 and 16. As discussed herein, the prior art fails to disclose the claimed limitations of the data management system of independent claims 1 and 16, and accordingly, Fig. 1 is not prior art and has never been alleged to be prior art by Appellants.

Applicants respectfully submit the objection to the drawings is in error and labeling Fig. 1 as prior art is contrary to the teachings of the originally-filed specification. Applicants respectfully request withdrawal of the objection to the drawings.

#### FF. The objection to the title is in error.

Appellants respectfully submit that the present title corresponds exactly to preambles of the pending claims and accordingly is highly indicative of inventive embodiments to which the claims are directed.

In addition, Appellants respectfully submit that the title is accurate and in compliance with the CFR. In particular, 37 CFR 1.72 states that the title must be short as possible. Applicants respectfully submit that the title complies with the requirements of the CFR. In particular, the title corresponds to preambles of pending claims of the present application. Accordingly, the title is both specific to subject matter of claims of the application and is also brief. Applicants respectfully assert that the present title is sufficient for indexing, classification and searching.

Applicants respectfully request approval of the title as submitted as corresponding to subject matter of claims of the application, and accordingly, is specific and descriptive of subject matter of the application while also complying with the brevity requirement of the CFR.

Accordingly, Applicants respectfully requests reconsideration of the objection to the title for the above-mentioned compelling reasons.

#### GG. The objection to the specification is in error.

The Office objects to the Summary of the Invention in the Office Action. The specification originally included a Summary of the Invention section which included language of the independent claims. The Office, without any support that such language in the original Summary was improper, objected to the Summary during previous prosecution. In an effort to facilitate the prosecution of the present application, Appellants deleted the previously objected-to Summary. Now, the Office still objects to the Summary in the present Office Action. However, the Office has failed to identify any authority that the application must include a specification.

The Office refers to MPEP 608.01(d) in support of the objection to the specification. Appellants note that *MPEP 608.01(d) is devoid of any requirement that the application must include a summary.* 37 CFR 1.73 clearly does not require a summary section by explicitly stating that the brief summary of the invention should precede the detailed description. 1.73 further provides "[s]uch summary should, when set forth, be commensurate with the invention as claimed..." (emphasis added). It is clear from such rule that a summary is not required and the objection to the specification on this basis is in error.

Appellants respectfully submit the Examiner has failed to identify any authority that the application must include a Summary. To the contrary, the authority including the MPEP and CFR noted above make explicitly clear that the summary is optional and not required. However, Appellants agree to again amend the specification to include a Summary section similar to the original filling of the application and corresponding to the independent claims if such would further the prosecution of the present application. Indeed, Appellants respectfully submit that the original summary including language of the independent claims complied with

37 CFR 1.73 stating that, if a summary is provided, it should be commensurate with the invention as claimed.

Appellants respectfully submit the specification is proper.

HH. Conclusion

In view of the foregoing, reversal of the rejections of the claims is

respectfully requested. For any one of the above-stated reasons, the rejections of the respective claims should be reversed. In combination, the above-stated reasons

overwhelmingly support such reversal. Accordingly, Appellants respectfully request

that the Board reverse the rejections of the claims.

Respectfully submitted,

Date: February 23, 2010

Attorney: /James D. Shaurette/

James D. Shaurette

Reg. No. 39,833

#### VIII. APPENDIX A - THE CLAIMS INVOLVED IN THIS APPEAL

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1. [Previously Presented] A data management system comprising:

a data storage system configured to store data of a plurality of protected computer systems, wherein the data storage system comprises a plurality of storage devices individually having a respective capacity, and a quantity of the data of the protected computer systems to be stored exceeds capacities of individual ones of the storage devices: and

storage control circuitry coupled with the data storage system and configured to assign individual ones of the individual storage devices to store data for respective ones of the protected computer systems.

- 1 2. [Previously Presented] The system of claim 1 wherein the storage
  2 control circuitry is configured to receive a request to add a new protected
  3 computer system and to assign only one of the storage devices to implement
  4 data storage operations with respect to the new protected computer system as
  5 a result of the request.
- 1 3. [Previously Presented] The system of claim 2 wherein the storage control circuitry is configured to monitor a status of the one storage device and to assign the one storage device for the new protected computer system using the monitoring.
- 1 4. [Previously Presented] The system of claim 3 wherein the 2 monitoring comprises monitoring a processing capacity of an archive agent of 3 the one storage device.
- 1 5. [Previously Presented] The system of claim 3 wherein the 2 monitoring comprises monitoring a storage capacity of physical storage space of 3 the one storage device.

- 1 6. [Previously Presented] The system of claim 3 wherein the 2 monitoring comprises monitoring a status of a plurality of the storage devices, 3 and the assigning comprises assigning the one storage device which has a 4 greatest available capacity using the monitoring.
- 7. [Original] The system of claim 1 wherein entireties of the data for the protected computer systems are stored using respective assigned ones of the storage devices.
- 9. [Original] The system of claim 1 wherein the storage control circuitry is configured to assign a plurality of the storage devices to store an entirety of the data for one of the protected computer systems.
- 1 10. [Original] The system of claim 1 wherein the storage control circuitry comprises a tracking database configured to store associations of the storage devices with respective ones of the protected computer systems.
- 1 12. [Original] The system of claim 1 wherein at least one of the storage devices is configured to store data for a plurality of the protected computer systems.
- 1 14. [Original] The system of claim 1 wherein the storage control circuitry comprises a master cell manager and at least one slave cell manager, and wherein the master cell manager is configured to assign one of the protected computer systems to one of the storage devices associated with the at least one slave cell manager.
- 1 16. [Previously Presented] A data management system comprising:
  2 plural means for storing electronic data, wherein individual ones of the
  3 plural means for storing comprise a respective data storage capacity;
- 4 means for communicating data intermediate the plural means for storing 5 and a plurality of protected computer systems, wherein a quantity of data of

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6	the protected computer systems exceeds individual data storage capacities of
7	individual ones of the means for storing; and
8	means for assigning individual ones of the means for storing to store data
9	for respective ones of the protected computer systems.
1	17. [Previously Presented] The system of claim 16 wherein the plural
2	means for storing individually comprise means for storing an entirety of the data
3	for a respective one of the protected computer systems.
1	19 [Proviously Presented]. The system of claim 16 wherein plural once

[Previously Presented] The system of claim 16 wherein plural ones of the means for storing comprise means for storing an entirety of the data for a respective one of the protected computer systems.

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19. [Previously Presented] The system of claim 16 further comprising 2 tracking means for storing information regarding associations of individual ones 3 of the plural means for storing with respective ones of the protected computer systems.

- 1 [Original] The system of claim 16 wherein the plural means for 2 storing individually comprise archive means and physical storage means.
- 1 21. [Previously Presented] An article of manufacture comprising: 2 a processor-usable medium configured to store processor-usable code 3 configured to cause processing circuitry of storage control circuitry to:

4 access information regarding a plurality of storage devices; 5 access information regarding a plurality of protected computer 6

systems:

7 associate individual ones of the protected computer systems with 8 respective ones of the storage devices;

receive a request to add a new protected computer system:

10 monitor capacities of the storage devices; and

assign the new protected computer system to one of the storage devices using the monitoring.

1	22.	[Previously	Presented]	The	article	of	claim	21	wherein	the
2	processor-us	sable code is	configured to	caus	e the pr	oce	ssing c	ircuit	ry to perf	iorm
3	the associat	ion as a resul	t of user inpu	t.						

- 1 23. [Previously Presented] The article of claim 21 wherein the 2 processor-usable code is configured to cause the processing circuitry to perform 3 the association using the monitoring.
- 1 24. [Previously Presented] A data management system operational 2 storage method comprising:
  - providing a plurality of storage devices of a data management system configured to store data for a plurality of protected computer systems, wherein the storage devices individually comprise processing circuitry and a storage space;
- 7 monitoring capacities of individual ones of the storage devices:

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- 8 associating one of the protected computer systems with one of the 9 storage devices using the monitoring; and
- implementing storage operations of the data for the associated one of the protected computer systems using the associated one of the storage devices in accordance with the associating.
  - 25. [Original] The method of claim 24 wherein a quantity of data of the protected computer systems to be stored exceeds individual capacities of individual ones of the storage devices.
- 1 26. [Previously Presented] The method of claim 24 further comprising 2 maintaining a record of the association of the one storage device and the one 3 protected computer system.
- 1 27. [Original] The method of claim 24 wherein the monitoring 2 comprises monitoring storage capacities of the storage devices.

ı	28.	[Original]	The	method	of	claim	24	wherein	the	monitoring	
,	comprises monitoring processing capacities of the storage devices.										

- 1 29. [Original] The method of claim 24 wherein the monitoring and 2 assigning comprise monitoring and assigning using storage control circuitry.
- 1 30. [Original] The method of claim 29 further comprising providing the storage control circuitry comprising a distributed control system.
- 1 31. [Original] The method of claim 24 wherein the associating comprises associating the one protected computer system with the one storage device having a greatest available capacity.
- 32. [Original] The method of claim 24 further comprising transferring
  at least a portion of the data of the one protected computer system from the
  one storage device to an other storage device.
- 1 33. [Previously Presented] A data management system operational 2 storage method comprising:
- providing a plurality of storage devices of a data management system

  configured to store data for a plurality of protected computer systems, wherein

  the storage devices individually comprise processing circuitry and wherein the

  storage devices are external of the protected computer systems;
- 7 storing the data using the storage devices;
- 8 monitoring capacities of the storage devices using storage control 9 circuitry;
- providing a new storage device configured to store data for at least one of the protected computer systems; and
- 12 coupling processing circuitry of the new storage device with the storage 13 control circuitry.

- 1 34. [Original] The method of claim 33 further comprising monitoring capacity of the new storage device using the storage control circuitry after the coupling.
- 1 35. [Original] The method of claim 33 wherein the monitoring comprises monitoring processing capacities of the storage devices.
- 1 36. [Original] The method of claim 33 wherein the monitoring comprises monitoring storage capacities of the storage devices.
- 1 37. [Previously Presented] The system of claim 1 wherein the protected computer systems are external of the data management system.
  - 38. [Previously Presented] The system of claim 1 wherein the protected computer systems are associated with respective different entities and the protected computer systems are independent and not associated with one another.

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- 1 39. [Previously Presented] The system of claim 1 wherein the plurality
  2 of storage devices individually comprise processing circuitry and a physical
  3 storage space, and the processing circuitry of the storage devices are configured
  4 to control storage operations of respective ones of the physical storage spaces.
- 1 40. [Previously Presented] The system of claim 39 wherein the 2 storage devices are associated with one another and the storage control circuitry 3 is configured to implement data storage operations with respect to individual 4 ones of the storage devices.
- 1 41. [Previously Presented] The article of claim 21 wherein the storage 2 control circuitry and the plurality of storage devices are components of a data 3 management system which is configured to store data of the protected computer systems, and wherein the protected computer systems are external of 5 the data management system and the storage devices.

42. [Previously Presented] The method of claim 24 wherein the providing the plurality of storage devices comprises providing the storage devices of a data management system external of the protected computer systems, and further comprising:

storing data using storage circuitry of the protected computer systems;

storing the data of the protected computer systems using respective ones of the storage devices associated with the protected computer systems.

### 43. [Previously Presented] A computer network comprising:

a plurality of protected computer systems individually comprising processing circuitry configured to process data and storage circuitry configured to store the data; and

a data management system comprising:

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a data storage system configured to store the data of the protected computer systems, wherein the data storage system comprises a plurality of storage devices individually having a respective capacity, and a quantity of the data of the protected computer systems to be stored by the data management system exceeds capacities of individual ones of the storage devices; and

storage control circuitry coupled with the data storage system and configured to assign individual ones of the individual storage devices to store data for respective ones of the protected computer systems.

44. [Previously Presented] The network of claim 43 wherein the storage devices individually comprise:

a physical storage space configured to store the data of a respective one of the protected computer systems; and

processing circuitry configured to control storage of the data of the respective one of the protected computer systems associated with the individual storage device in the respective physical storage space of the individual storage device.

- 1 45. [Previously Presented] The network of claim 43 wherein the storage control circuitry is configured to associate the individual storage devices with respective ones of the protected computer systems using information regarding capacities of the storage devices.
- 1 46. [Previously Presented] The network of claim 43 wherein entireties
  2 of the data of the protected computer systems are individually stored by the
  3 respective assigned ones of the individual storage devices.
  - 47. [Previously Presented] The network of claim 43 wherein the protected computer systems are individually configured to communicate the data to the data management system via communications circuitry of the network.

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- 1 48. [Previously Presented] The method of claim 24 wherein the 2 monitoring, the associating, and the implementing comprise acts performed by 3 processing circuitry of the data management system.
- 1 49. [Previously Presented] The method of claim 24 wherein the 2 implementing storage operations comprises storing the data for the associated one of the protected computer systems using the associated one of the storage devices.
- 1 50. [Previously Presented] The method of claim 33 wherein the 2 monitoring comprises monitoring using processing circuitry of the data 3 management system.
- 1 51. [Previously Presented] The method of claim 33 further comprising 2 storing the data for the protected computer systems using the storage devices 3 of the data management system.

## IX. APPENDIX B - EVIDENCE APPENDIX

Appellants submit no evidence with the appellate brief.

# X. APPENDIX C - RELATED PROCEEDINGS APPENDIX

Appellants are not aware of any related proceedings.